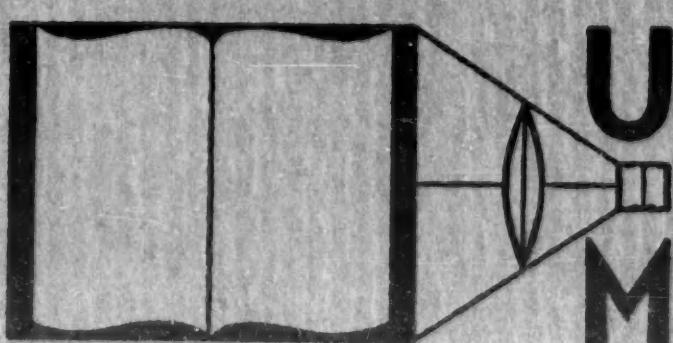


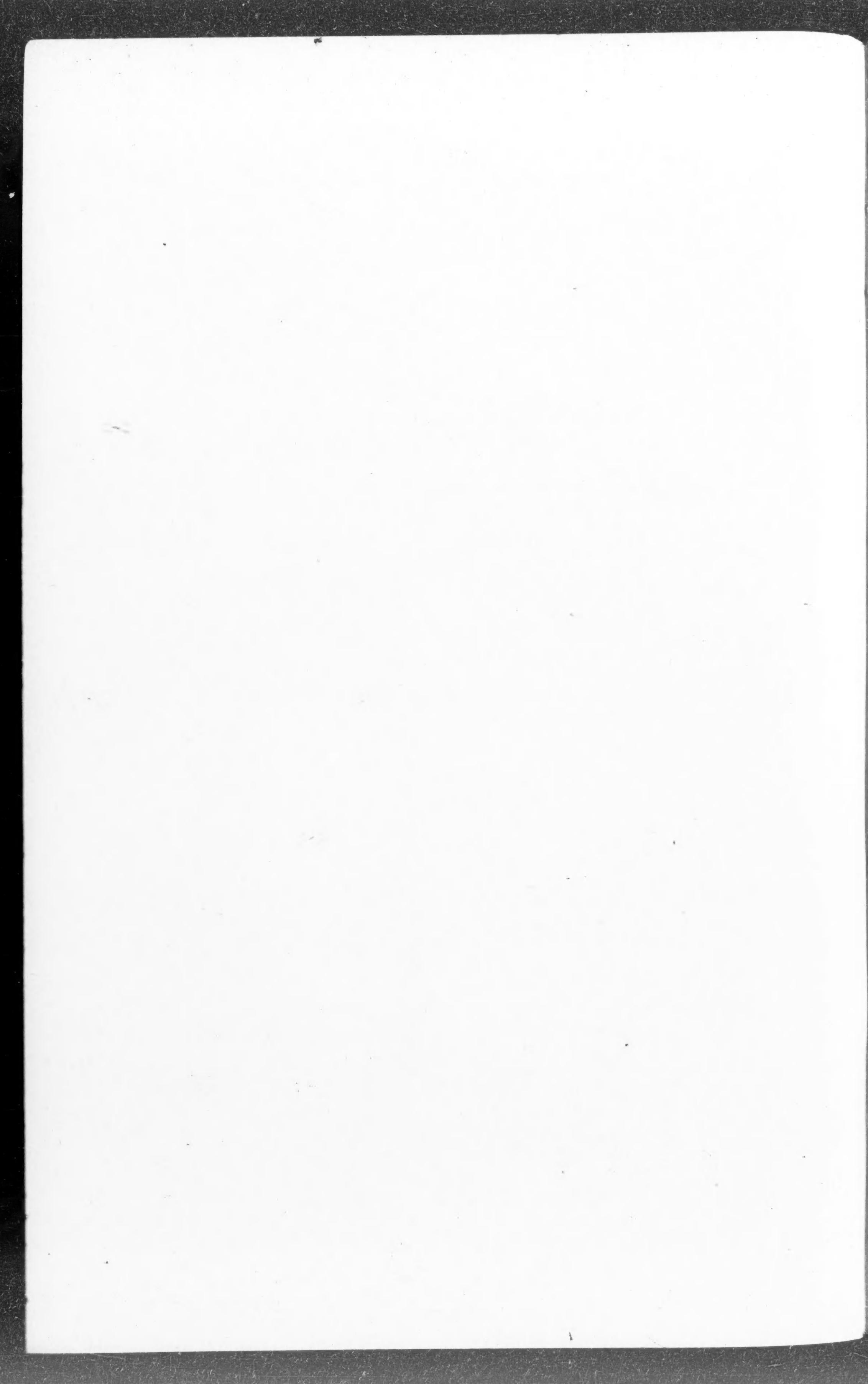
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Vol. III

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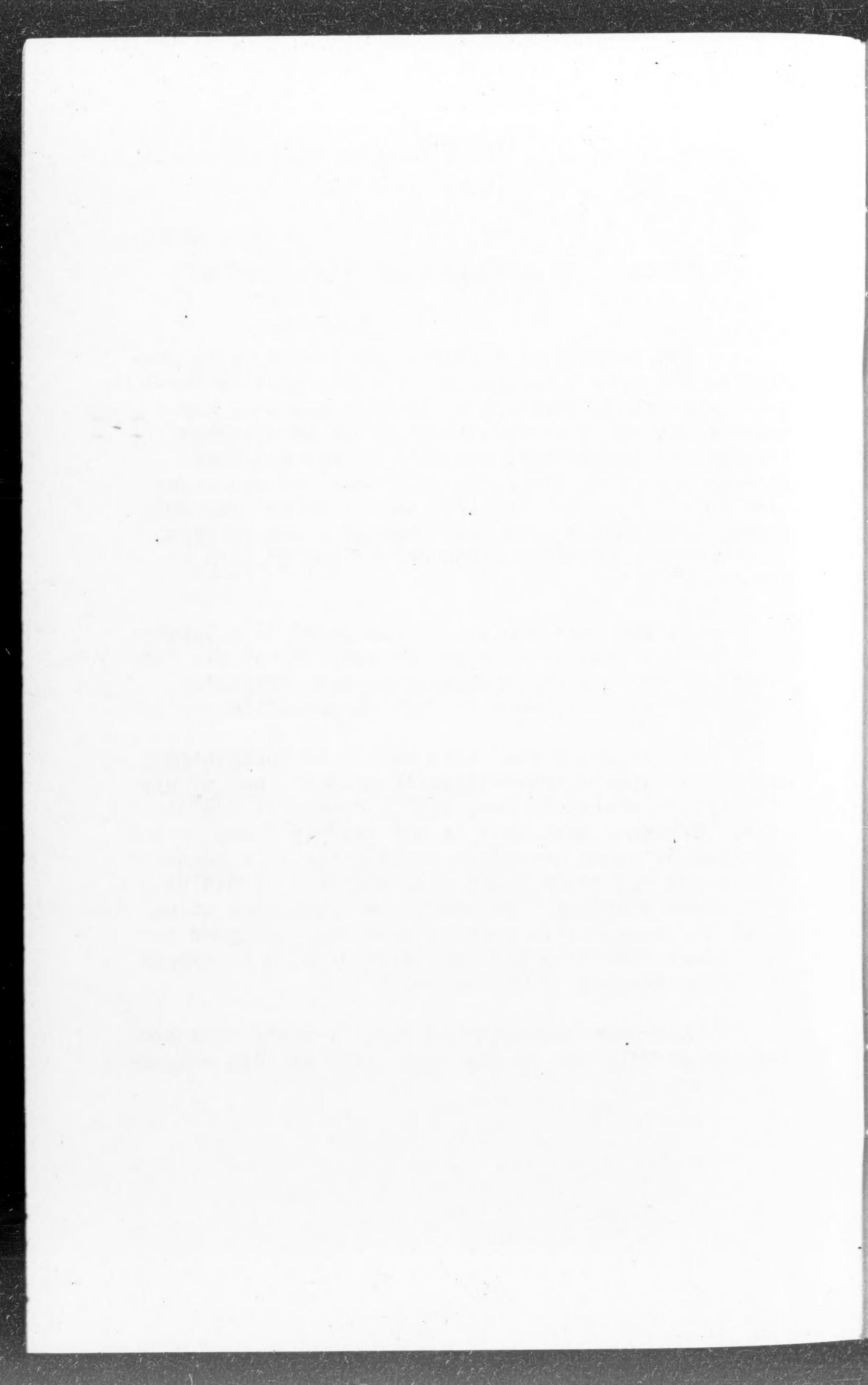
## INTRODUCTION

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Any suggestions as to ways by which this publishing service can be improved, will be very welcome.



## BIOLOGICAL CHEMISTRY

### STUDIES ON THE CAROTENOID PIGMENTS OF EGG YOLKS FROM HENS ON VARIOUS DIETS\*

Fielden Emmitt Jacob, Jr., Thesis (Ph.D.)  
University of Missouri, 1939

Earlier experiments in this laboratory had indicated the possibility of a constant ratio between the carotene and xanthophyll fractions of egg yolk pigments which was independent of the diet of the hen. This paper deals with the studies made to check this preliminary observation. Methods are given for extracting, separating and measuring the pigment content of egg yolk from hens on diets differing in the amount of carotenoid pigments. Studies were also made to see if the xanthophyll fraction of these eggs would show any curative effect when fed to albino rats that had been depleted of vitamin A reserves.

The pigments were extracted from the coagulated yolk with portions of acetone and ether. The extract was saponified with twenty percent potassium hydroxide in methanol and the nonsaponifiable fraction was extracted with ether. The dried ether extract was evaporated and the residue taken up in petroleum ether and ninety percent methanol. The pigments were partitioned between these two solvents. The dried petroleum ether extract was evaporated and the residue dissolved in absolute ethanol for measuring. The xanthophyll fraction was extracted from the methanol solution with ether. The dried ether extract was evaporated and the residue taken up in absolute ethanol for measuring. All evaporation were made on a water bath under partial vacuum and with a slow stream of dry carbon dioxide. The measurements were made on an Aminco "Type V" photometer using the 4358 Angstrom line of the mercury spectrum.

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\*Abstract of a thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate School of the University of Missouri, 1939.

The pigments for feeding were separated in essentially the same way. The cholesterol was removed by chilling in a dry ice-acetone mixture. The vitamin A was removed by adsorbing the pigments on a chromatographic column of calcium carbonate. Part of the xanthophyll was obtained in crystalline form. The xanthophyll was fed in a Wesson Oil solution at a level of 280 gamma per week.

The results of the pigment analyses showed that on a diet containing 35 percent yellow corn hens laid eggs averaging 19.9 gamma of xanthophyll and 3.7 gamma of carotene per gram of yolk. The ratio was 5.32. A diet containing 65 percent yellow corn gave averages of 20.5 gamma of xanthophyll and 4.3 gamma of carotene with a ratio of 4.83. A diet containing 65 percent yellow corn and 10 percent alfalfa leaf meal gave eggs averaging 71.0 gamma of xanthophyll and 10.4 gamma of carotene per gram of yolk with a ratio of 7.05.

The biological tests of the xanthophyll fraction for vitamin A showed better growth with egg yolk xanthophyll at 280 gamma per week than with 6 gamma of beta-carotene. All signs of avitaminosis A cleared up rapidly and autopsy showed no abnormalities. Further work is being done to check this possible vitamin A activity of egg yolk xanthophyll.

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## THE UTILIZATION OF LACTOSE BY THE WHITE RAT

Margaret Elizabeth Nalder, Thesis (Ph.D.)  
University of Michigan, 1940

A method for the determination of glucose, galactose, and lactose in the intestinal filtrates of rats is described.

At definite intervals following the oral administration of lactose by stomach tube to adult rats, the animals were killed and the contents of the gastrointestinal tract were analyzed. From the results of these analyses, the rate of hydrolysis of lactose and the absorption of its hydrolysis products, glucose and galactose, were determined.

At the end of 1, 2, and 3 hours following the administration of approximately 2 gm. of lactose per kg., an average of 32, 59, and 73 per cent, respectively, was hydrolyzed in the intestines. During these same time intervals, 72, 83, and 89 per cent, respectively, of the galactose which was formed was absorbed. The glucose which was formed by the hydrolysis of lactose was absorbed even more rapidly since only small traces could be found in the intestinal tract at the end of these absorption periods.

The administration of fat (Mazola oil) with the lactose did not significantly affect the amount of lactose hydrolyzed or galactose absorbed. The administration of calcium (calcium chloride) with the lactose resulted in a definite decrease in both the hydrolysis of the lactose and the absorption of galactose. No sex difference was noted in these absorption experiments.

The liver glycogens of the rats used in the absorption experiments were also determined. The results showed a definite sex difference. The average percentages of liver glycogens at the end of the 1-, 2-, and 3-hour absorption periods were 0.63, 1.27, and 1.34 for male rats and 0.42, 0.85, and 1.01 for female

rats, respectively. The simultaneous administration of fat with the lactose did not significantly affect the deposition of liver glycogen, but the administration of calcium salts with the lactose resulted in a decreased deposition of liver glycogen.

In supplementary blood sugar studies, it was found that the oral administration of 2 to 4 gm. of lactose per kg. produced an average rise in blood glucose of 29 mg. per cent. Small amounts of an unfermentable reducing substance also appeared in the blood. The administration of galactose produced an average rise in blood glucose of 35 mg. per cent and the appearance of considerable amounts of blood galactose (49 to 149 mg. per cent). If, however, calcium chloride was administered with the galactose, the increase in both blood glucose and galactose was less than that which resulted from the administration of galactose alone.

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## CHEMISTRY

### THE EFFECT OF THE POSITION OF SUBSTITUTION ON THE IONIZATION CONSTANTS OF SOME AROMATIC AMMONO- ACIDS IN LIQUID AMMONIA

Dr. Czu-Chih Liu, Thesis (Ph. D.)  
University of Kansas, 1929

The purpose of the present study is to determine, by conductivity measurement, the ionization constants of some substituted aromatic ammono-acids in liquid ammonia and to observe the relationship between the positions of substitution and the ionization constants of the ammono-acids. The substances studied were: benzamide, ortho-, meta- and para-toluamide, ortho-, meta-, and para-tolusulfonamide, ortho-, meta-, and para-chlorbenzamide and ortho- and meta-brombenzamide together with their sodium or potassium salts. The limiting equivalent conductance and the ionization constant were evaluated from the conductivity data by the graphical method of Kraus and Bray (J. Am. Chem. Soc., 35, 1317, 1913).

The ionization constant of benzamide is reduced by the presence of a methyl group on the benzene nucleus. Meta-substitution reduces the constant to  $1/5$ , ortho-substitution to  $1/10$  and para-substitution to  $1/12$ . In water system, methyl substitution in the ortho-position increases the ionization constant of benzoic acid, while the meta- and para-substitution decrease it only slightly.

In the case of benzene sulfonamide, the methyl substitution also decreases the ionization constant. Ortho-substitution reduces it only slightly, while meta- and para-substitution reduce the constant to one half of the original value.

The conductivity data for the halogen substituted benzamides are not sufficient for the evaluation of the limiting conductance and the ionization constant. They seem to indicate that, at a given

dilution, the meta-isomer is more conducting than the ortho- and para-isomers.

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A PRELIMINARY STUDY OF THE ANODIC PHENOMENA  
OCCURRING IN ORGANIC ELECTROLYSIS

Leonard William Gaddum, Thesis (Ph. D.)  
University of Missouri, 1924

Preliminary calculations have been made in an endeavor to connect the electrolytic decomposition potentials of compounds with the electron affinity of the constituents of the compounds. Under the assumption that the conduction electrons follow the ideal gas laws, it is calculated that the decomposition potential of water at platinum black electrode should be

$$E(H_2O) = E(\text{anode}) + E(\text{cathode}) = 1.226 \text{ volt}$$

if only hydroxyl ion reactions are involved at the node. It is pointed out that generally the anode reaction involves also ions other than hydroxyl ions. In the relatively simple case when halide ions also enter the anode reaction the decomposition potentials of the halide acids are calculated, yielding values which are in reasonable accord with experimentally observed values. The factors involved in the extension of the calculations to the electrolytic decomposition of organic compounds are discussed.

Depolarization curves, showing the relation between impressed electromotive force and current, were obtained experimentally for fumaric, mesaconic, maleic, and mandelic acids in solutions having various pH values. From these curves the decomposition points of the acids were estimated. It was difficult to obtain accurate results with solutions having pH values of 11.35 and 9.20. Reasonable results were more easily obtained with solutions having a pH value of 10.35, yielding values for decomposition points as follows:

fumaric acid	1.5 volt
mesaconic acid	1.4 volt

maleic acid	1.0 volt
mandelic acid	0.8 volt

and depolarization values as follows:

fumaric acid	0.0 volt
mesaconic acid	0.1 volt
maleic acid	0.5 volt
mandelic acid	0.7 volt

- Secondary decomposition points were investigated for malic, mandelic, phenylacetic, and cinnamic acids.

Some organic compounds were electrolytically oxidized, with controlled electromotive force, and yielded results as follows.

1. The electrolysis of phenol in absolute methyl alcohol yielded as anode products: hydroquinone and an unidentified resin.
2. The electro-synthesis of phenyl iodide was attempted and was successful experimentally, but not as a practicable means of preparation of phenyl iodide.
3. The anodic oxidation of mandelic acid yielded benzoic acid as anode product.
4. In ethyl alcohol solution, the methyl ester of mandelic acid was oxidized to benzoyl formic acid.

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CONDENSATION OF SOME DIALKYL ARYL CARBINOLS WITH  
BENZENE AND PHENOL IN THE PRESENCE OF  
ALUMINUM CHLORIDE

F. A. Hughes, Thesis (Ph. D.)  
Michigan State, 1940

The problem consisted of condensing dimethylphenyl, methylethylphenyl, and diethylphenyl carbinol with benzene and phenol using aluminum chloride as a catalyst.

Benzene (1.25 moles) and aluminum chloride (.125 moles) were stirred together while the carbinol (.25 moles) was added dropwise to the suspension. The temperature was maintained between 20-30° by means of a water bath. After standing overnight the mixture was decomposed by pouring on ice and hydrochloric acid. The benzene layer was separated and distilled, collecting all fractions.

Dimethylphenyl and methylethylphenyl carbinol condensed with both benzene and phenol. Diethylphenyl carbinol condensed with phenol but did not condense with benzene under similar conditions. The dehydration product of the alcohol was obtained in the condensations of diethylphenyl and methylethylphenyl carbinol. A saturated compound in which the hydroxyl of the alcohol was replaced by a hydrogen was identified in the condensation of methylethylphenyl carbinol with benzene and diethylphenyl carbinol with benzene and phenol. In the condensation with benzene the dehydrated carbinols formed dimers. With phenol only dimethylphenyl carbinol formed a dimer of the dehydrated product 2-phenyl propene.

The structure of p-( $\alpha$ -methyl- $\alpha$ -ethyl benzyl)-phenol and p-( $\alpha,\alpha$ -diethyl benzyl)-phenol were established by synthesis. The chloride of the proper carbinol was reacted with p-anisyl magnesium bromide and the resulting ether converted to the phenol by refluxing with hydrobromic acid. The phenols were identified

by boiling points and mixed melting point determinations of their benzoyl esters.

Attempted synthesis of the dimers of 2-phenyl-2-butene and 3-phenyl-2-pentene did not meet with success. The procedure in the case of the first of these consisted of condensing homomesitone with benzene in the presence of aluminum chloride, treatment of the resulting ketone with phenyl magnesium bromide and final dehydration of the alcohol by means of aluminum chloride to give a compound which was believed to be 1,2,3-trimethyl-1-ethyl-3-phenyl indan.

A similar series of reactions starting with 4-methyl-5-ethyl-4-hepten-3-one gave a compound which was assumed to be 1,1,3-triethyl-2-methyl-3-phenyl indan.

These synthesized compounds resembled the dimers isolated from the condensations in boiling point and resistance to oxidation by alkaline permanganate, but they differed in spectrum and in action toward nitric acid.

Molecular refractions indicate the probability of a mixture in each case of indan and unsaturated dimer.

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## ECONOMICS

### ECONOMICS OF THE COMMUNITY BONUS WITH SPECIAL REFERENCE TO THE MISSOURI BOOT AND SHOE INDUSTRY

Carl Wilburn McGuire, Thesis (Ph. D.)  
University of Missouri, 1939

It is a widespread practice in the United States for communities to give bonuses to attract the location of new industries and to encourage the expansion of old industries. An excellent opportunity to study this phenomenon is afforded by the boot and shoe industry of Missouri, for the location of almost every shoe factory outside the large cities of the state has been accompanied by the grant of a substantial bonus.

Investigation for this study has yielded data concerning 105 bonuses given to 46 shoe companies by 55 communities in Missouri. The total value of these bonuses is estimated to be \$2,889,700. The special inducements granted are usually specified in a contract between the community, represented by the local business men's organization, and the shoe company. The typical bonus contract provides that the community through the Chamber of Commerce shall furnish the company with a factory building complete except for shoe machinery. In some cases additional concessions such as grants of cash and sales of company stock are included. In return for these concessions the company agrees to manufacture shoes locally and to pay out in the community a stipulated amount in wages within a given number of years.

Analysis of shoe production costs reveals that the transfer of the shoe industry since 1900 from the Midwest center, St. Louis, to its rural hinterland has been the result, not of the concessions formally granted in the bonus contract, but of the lower wage rates and the more docile labor force available in the country. Labor cost is the decisive

influence in location because it is the single major item in which one producer can obtain a cost differential over another in this highly competitive industry. The bonus has locational significance in that it determines which of several communities equally well adapted to shoe manufacturing have obtained factories.

To the shoe manufacturer the factory building provided by the bonus contract is not as significant as the guarantee of community cooperation which the bonus implies. The bonus gives the community a stake in the enterprise and assures a favorable attitude toward it. Because the bonus permits the company to transfer its operations elsewhere without loss, the bonus makes possible the threat of removal, an economic sanction effectively providing community cooperation. Cooperation takes many forms, discipline of factory labor being the most important. Local business leaders are able to promise cooperation to the company because they dominate the community and its institutions.

The establishment of the local factory usually has brought to the community an increase in total income and in per capita income, a growth in population and an increase in the variety of goods obtainable locally. However, the irregularity of production in the shoe industry has probably accentuated the fluctuations in the business activity of the factory town. Whether the personal welfare of a particular local citizen has advanced, is dependent upon his particular economic interests and upon the size of his contribution to the bonus fund.

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## EDUCATION

### THE DEVELOPMENT OF THE CONTROL OF EDUCATION IN IRAN

Abul-Hassan Sassani, Thesis (Ph. D.)  
University of Missouri, 1940

The objectives of this thesis are twofold. First, the writer wishes to analyze critically the present Iranian educational system in the light of its underlying historical and cultural foundations. Second, the writer proposes a modification of the present system which naturally results from the comparative and critical analyses of assembled material.

The problem is limited to those public schools of Iran which are under the control of the Ministry of Education. The study is also limited to the documentary evidence found in the Iranian Constitution, materials found in this country, and those sent from the Ministry of Education. The data have been supplemented by the writer's own experiences and familiarity with the entire system of education in Iran and with the verified opinion of different scholars in regard to the situations.

The outstanding characteristic of the administration of education in Iran is its excessive centralization in a Ministry of Education at Teheran, the capital city. According to the Constitution all schools and colleges are under the supreme control and supervision of that Ministry.

The introduction of French centralization into the country tended to secularize education, but, unfortunately, also added the essential philosophy of authority inherent in the pre-existing educational system of Iran.

Excessive centralization has tended toward rigid and mechanical goals and processes, domination of State examination, memorization instead of reasoning, and overemphasis on preparation for government posts. The standardized curricula for all schools regardless of the need of the communities for the prescribed courses, with muzzled teachers who have to

follow orders rather than adapt instruction to the needs of the child, with the emphasis on quantity rather than quality, and harsh discipline have removed Iranian schools from being educational institutions in the modern sense of the word. The educational atmosphere and regimentation have also developed more docility and subservience in the temperament of Iranian students.

Iran needs a new educational policy: a spirit of freedom and activity, one which condemns dictation, passivity, and extreme standardization. Iranian education has suffered basically from an excess of centralization. The solution of the problem lies in the introduction of a more flexible system, a combination of centralization and decentralization. The participation of other educational authorities with the Ministry of Education is proposed. The writer suggests changing the name of the Higher Council of Education at the Capital to the National Board of Education, and adding the following representatives: two principals and two teachers of elementary schools, elected representatives from each Academic Province, and representatives from private schools. The chairman of this Board of Education shall be recommended by the Consultative Assembly (Majlis) and appointed by the King. The Minister of Education shall be the executive officer of this Board.

The National Board of Education should have general legislative duties. It is also recommended that a Department of Research should be created. The cooperation of all educational agencies with the proposed Department of Research is also advised. The study suggests, moreover, consideration of a number of other problems of education, such as combating illiteracy among the farmers, revision of curriculum organization in the secondary schools, investigation of the facilities for educating Iranian women, etc.

Publication Number 221

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## JOURNALISM

### THE RELATION OF BACKGROUND STUDY TO EDITORIAL EFFECTIVENESS

Stuart Ansala Mahuran, Thesis (Ph. D. )  
University of Missouri

January 6, 1934, twenty-six editors, asked to criticise American newspaper editorials, declared their chief faults were superficiality, name-calling, carelessness and heaviness, and lack of attention to local issues.

In an attempt to apply these criticisms to a selected group of Missouri-Valley editorials published between September 20, 1937 and September 20, 1938 in The Omaha (Nebraska) World-Herald, The Council Bluffs (Iowa) Nonpareil, The Atlantic (Iowa) News-Telegraph and The Adams County (Iowa) Free-Press standards were set up and applied to the editorials studied during that period of time.

Together with the editorials to which the standards had been applied the findings, each revealing the absence or presence of a fault previously ascribed to editorials in general, were submitted to authorities in the fields of history, English, logic, economics and journalism.

In most cases these authorities agreed with the conclusions obtained by application of the standards, in addition to a year's study of the newspapers observed, their ownership, history, location, editorial staffs and political affiliations.

Editorials studied, the standards used to evaluate them and individual comment and replies both as to procedure and results obtained are incorporated in the thesis. In addition each editorial writer's experience, education, methods of study, reading habits and access to library facilities, having been observed during the twelve-month period of time, is noted and made use of in the application of the standards.

Lists of books in history and economics, submitted by leaders in those fields as books editorial writers should read and know are both included and quoted to reveal either familiarity or lack of familiarity with their contents by individual editorial writers as their output was scrutinized.

Chapters in the thesis follow an Introduction which points to the requirement for thoroughly competent editorial analysis in a period of profound international and national governmental change. Chapter I considers the Problem and the Need; Chapter II takes up the histories of the newspapers studied; Chapter III sets up the Standards, and Chapter IV applies the Standards.

Final chapters consider each newspaper's annual output of editorials with regard to strength or weakness of editorial interpretation and analysis. The Conclusion offers suggestions for betterment and improvement, pointing to excellencies as well as deficiencies, proffering the hope that the study may be of use to publishers, to editorial writers, to students of journalism and to teachers of journalism.

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## LITERATURE

### THE ETHICAL CONCEPTION OF LITERATURE IN ENGLISH LITERARY THEORY

Miriam Smyth, Thesis, (Ph. D.)  
University of Kansas

The purpose of this work is to examine the tendency in English critics to appraise literature, to a significant degree, for its moral qualities: its freedom from alleged unwholesome features, its ability to inculcate moral virtues, and its power to inspire; and particularly to study the Victorian conflict between this tendency and one which may be called non-ethical.

The first chapters sketch the classical, Medieval, and Renaissance background for this conflict. The first incident is Plat's rejection of Homer on the ground that his pictures of the gods are false, and that poetry, like most art, is but an inferior copy of the real. Attention is called, however, to Plato's vision of Heavenly Beauty and of poetry as divine madness. Those who believe that poetry must explicitly teach follow the first view; those who believe its teaching implicit through inspiration follow the second. Medieval Christians, like Plato, condemned art, but afterward impressed it into the service of the Church. Characteristic of both the Middle Ages and the Renaissance were the many defenses of poetry, in which its lovers declared it to be not only harmless but powerful in ministering to the good.

Sidney's Apology for Poetry and Gosson's attack which occasioned it constitute the first main contest on English soil. During the seventeenth and eighteenth centuries the exactions of Puritanism were reinforced by Neo-Classicism, with its demands for reason, utility, and decorum. From such a yoke the Romantic Age revolted, but not to a non-ethical position. Poetry to it was by nature "the breath and finer spirit of all knowledge."

The time came, however, when writers insisted that the moral aspect of a writing has little to do with its value as a piece of literature. They were goaded to this position by the Victorian preoccupation with the useful and the moral. Each camp embraced diverse groups. The first united utilitarians who expected literature to instruct by precept and example; "Victorians" afraid of indecency and governed by reticences and taboos; and the great idealistic critics and authors like Carlyle, Ruskin, Arnold, Tennyson, and Browning, who shared the Romantic view of the poetic mission. In the second were the Pre-Raphaelites with their cult of beauty; the young rebel Swinburne; Pater with his religion of hedonism; Wilde, Moore, and Symons harping on "art for art's sake" in the mad fin de siècle days; and the new realists with their contempt for Victorian prudery.

The revolt overreached itself in the nineties and collapsed; but who won is hard to tell. One conclusion is sure: the ethical attitude in English literary criticism and theory has been thus far persistent, a force not to be disregarded.

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## PHILOLOGY

### FUNCTIONAL GRAMMAR AND ITS RELATION TO CORRECT ENGLISH USAGE

Mary Fee, Thesis (Ph. D.)  
University of Kansas

#### The Problem

The study attempted to answer the following questions:

1. Does a knowledge of "functional" grammatical principles function in correct English usage of high school students as measured by ability to recognize and correct errors in sentences and by accuracy in the free writing of letters and compositions?
2. What are the relationships of reading skill, general mental ability, and cultural background to: (a) a knowledge of "functional" grammatical principles? (b) the ability to recognize and correct errors in sentences? and (c) accuracy in the free writing of letters and compositions?

#### Method of Procedure

The data, on which the study was based, included the scores made by 292 tenth grade students of Topeka, Kansas, High School in the following testing program:

##### General Tests

1. Iowa Silent Reading Tests  
Advanced Test: Form A (Revised)  
For High Schools and Colleges
2. Kuhlmann-Anderson Test  
Grade IX--Maturity
3. Questionnaire

##### Initial Tests (Sept. 14-20, 1937)

4. Kirby Grammar Test, Form I
5. Informal Grammar Test

6. The writing of one composition
7. The writing of one letter

Final Tests (May 27-June 1, 1938)

8. Kirby Grammar Test, Form II
9. Informal Grammar Test
10. The writing of one composition
11. The writing of one letter

The reading and mental tests were used to study the influence of reading skill and mental ability upon knowledge of grammatical principles, ability to correct errors in sentences, and ability to use English correctly in free writing. The questionnaire was given for the purpose of determining the cultural background of the students. The grammar tests were necessary to compare the grammar knowledge of students with their ability to correct errors in sentences and with their ability to use English correctly in the free writing of letters and compositions.

The test scores were treated statistically and this involved such techniques as comparison of measures of central tendency, determining gains, intercorrelation, and partial correlation. The method of contrasted groups was used to determine the influence of cultural background, mental ability, and reading skill upon correct usage in free writing.

Results

During the tenth school year in which these students studied grammar, they gained some slight facility in correcting errors in sentences and somewhat more in recognizing and recalling principles applicable to the corrections made, but the relationships of the latter with the former are scarcely great enough to indicate conclusively that a knowledge of grammatical principles has affected correcting ability.

A significant amount of correlation was found to exist between reading skills and all grammar abilities, and somewhat more between general mental

ability, grammar knowledge and correcting ability. It seems conclusively apparent that reading skill and general mental ability are factors contributing to correcting ability and to a knowledge of grammatical principles. The correlation between reading skill and the parts of the Informal Grammar Test is significantly high; the amount of correlation decreases with the final test results in spite of the fact that the mean and median scores indicate some actual improvement. These results point to the probable conclusion that the teaching of functional grammar to these tenth grade students has contributed little to their ability to correct errors in sentences and to use accurate English in their free writing. Such a conclusion is further substantiated by other evidence. The amount of correlation between grammar abilities and accuracy of usage in free writing is so low in every instance as to be negligible, and the students who use the greatest accuracy in their free writing are those who have the greatest amount of reading skill, the most general mental ability, and the most favorable cultural background. In view of these facts it seems doubtful whether the teaching of functional grammar has greatly affected ability to correct errors in sentences or the accurate usage of English in free writing. It seems possible and even probable that the tenth grade grammar curriculum does not offer ample opportunity for growth in the grammar abilities.

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POLITICAL SCIENCE

AGRARIAN POLITICS IN MISSOURI  
1880-1896

Homer Clevenger, Thesis (Ph. D.)  
University of Missouri

The agrarian influence in politics in Missouri from 1880 to 1896 was manifested in a struggle between two factions for control of the Democratic party. The animosities which might have marked such a struggle were subdued by the desire of each faction to keep the Republicans from securing the state offices. A third party, whose platforms indicated that it was a farmers' party, often co-operated with the Republicans and thus added to the influence which created the compromising attitude between the two Democratic factions.

The farmers were aroused from an indifference to political affairs by unfavorable economic conditions and a changing social environment. At a time when their environment was causing their wants to increase, their incomes failed to keep pace. While the farmers were discontented and restive, a group of leaders developed who proposed to secure relief through legislative action. The program of agitation, education, and organization which they inaugurated not only made the farmers more militant in party politics but also transformed their economic and political theories.

In the struggle to regulate the railroads and curb the activities of trusts and monopolies, a majority was led to accept the principle that the government must intervene to protect the economically weak from the strong. Acting on the principle, the Missouri General Assembly showed an increasing tendency after 1880 to pass laws to protect the rights of laborers, to guard the public health, and to amend the common law of caveat emptor. In their attempts to secure legislation, the farmers learned that the political system was too insensitive to public opinion. They reacted by demanding the initiative,

referendum, recall, the Australian ballot, state regulated primaries, and laws forbidding corrupt practices in elections.

The transformation of their political views brought the farmers into conflict with the conservatives in the Democratic party. The farmers, aided by the representatives of the commercial and manufacturing interests who also wanted to regulate the railroads, defeated the conservatives in 1884. Old age and the subsequent strife growing out of the successful attempt to secure state regulation of railroads practically eliminated the older conservative influence in 1888. New factions began to develop almost immediately. The manufacturers broke away from the new group because of the demands for tariff reduction in 1888, and the farmers and merchants began to draw apart over the question of extending the principle of state regulation to all corporations in 1889.

When the emphasis shifted from state to national policies in the early nineties, the money issue brought a sharp conflict between the agricultural and commercial interests. The commercial element, which had secured control of the party machinery in 1888, was able to force a compromise program in 1892 and to stifle the farmers' desire to make a protest in the platform of 1894. Aroused by the defeat of their party in the state in 1894 and goaded to action by President Cleveland's promotion of conservative national policies, the Democratic farmers revolted, seized control of the party machinery, and emerged victorious in 1896.

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Publication Number 222

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## SOCIOLOGY

### TRANSIENT MEN IN MISSOURI A Descriptive Analysis of Transient Men and of the Activities of Agencies Dealing with Them

John Paul McKinsey, Thesis (Ph. D.)  
University of Missouri, 1940

The problem in this investigation is to analyse the characteristics of transient men and to describe the functioning of agencies dealing with them. By such an analysis there is shown the relationships which exist between transients and the agencies offering care for them.

While technically limited to Missouri, the study introduces enough data from other areas, and from the past, so that perspective is gained on the specific situation in the one state. Emphasis is laid upon the men included in, and the functions of, the Federal transient program and its supplementary activities.

The author draws upon secondary sources for information covering other areas and times, but depends almost entirely upon original data in handling the contemporary period in Missouri. Three statistical samples which include 6000 case records are utilized for analysis of the men. State transient bureau statistical and fiscal reports supplement these samples. Documents, memoranda, letters, telegrams and the experience resulting from six years of personal administrative contact with the transient program, complete the original sources.

In presenting the material, the author gives one chapter each to a consideration of the concept of transiency, and to the quantitative extent of the problem from 1900 to the present. There follow three chapters of analysis of the demographic and behavior characteristics of transients a transitional chapter which introduces the problems connected with transiency and the development of agency care in Missouri,

and three chapters dealing with the functioning of the Federal Transient Bureau and the WPA. Finally, a chapter concerning the theoretical implications of the preceding analysis summarizes the findings and presents suggestions concerning the problem.

After a consideration of age, education, race and nativity, marital status, family connections, occupational classifications, reasons for migration, employability, rates of travel, duration of migration, origins, and behavior traits, the study finds:

(1) that transient men cannot be separated, as a class, from the unemployed, except in terms of non-residence; (2) that they cannot be considered as "chronic" transients entirely, since a large majority have residences, families, and remain transients less than a year; (3) that they demonstrate characteristic behavior involving extreme egocentrism, emotional instability, lack of persistence, and general apathy.

A consideration of the activities of the transient bureau includes an analysis of material relief, and a description of the case-work, recreational, and works program. The later labor camp program, with its policy of cash wages, is described in order to offer comparison with the previous efforts. The data show that the purposes of the transient bureau were to provide adequate relief and to prevent further transiency. The author finds that the first purpose was undoubtedly achieved, but that the second purpose was definitely not fulfilled in the early program and only partially in the later phases of activity. He suggests, finally, that the lack of distinctiveness of transient men weakens the theory of categorical relief for transients (except for fiscal division), and that the failure of the case approach to solve transiency indicates the need for a different theory of therapy.

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Publication Number 219 .

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